

Title (en)

Air conditioning apparatus usable for wide-range source voltage.

Title (de)

Klimaanlage, verwendbar für einen weiten Bereich von Eingangsspannungen.

Title (fr)

Appareil de conditionnement utilisable pour une source de tension à large gamme.

Publication

EP 0652634 A3 19950726 (EN)

Application

EP 94116901 A 19941026

Priority

- JP 27947793 A 19931109
- JP 874794 A 19940128

Abstract (en)

[origin: EP0652634A2] In air conditioner having a power-variable compressor, an inverter for varying the driving frequency of the compressor through V/f control, a controller for supplying a variable-frequency control instruction in accordance with the air conditioning load to the inverter, and an input voltage detector for detecting a source voltage input to the inverter, the controller includes reference means for beforehand storing V/f value data corresponding to plural voltage sections to which a predetermined range of the input voltage to the inverter is divided at a predetermined voltage interval, and selects data representing the ratio (V/f) of the output voltage (V) corresponding to the detected input voltage and the driving frequency (f) from the reference means to output the variable frequency control instruction to the inverter so that an air conditioning operation is carried out in accordance with the air conditioning load. <IMAGE>

IPC 1-7

H02P 7/62

IPC 8 full level

H02M 5/458 (2006.01); **H02P 4/00** (2006.01)

CPC (source: EP KR US)

F25B 49/022 (2013.01 - KR); **H02P 4/00** (2013.01 - EP US); **H02P 29/026** (2013.01 - EP US); **F25B 2600/021** (2013.01 - EP KR US); **F25B 2600/024** (2013.01 - KR); **F25B 2700/151** (2013.01 - KR); **Y02B 30/70** (2013.01 - EP US)

Citation (search report)

- [A] US 4488100 A 19841211 - FUJII HIROSHI [JP], et al
- [A] GB 2174259 A 19861029 - DRESSER IND
- [A] EP 0431563 A2 19910612 - TOSHIBA KK [JP], et al
- [A] US 4497057 A 19850129 - KATO TAKAAKI [JP], et al
- [A] GB 2256940 A 19921223 - DRAYTON CONTROLS [GB]
- [A] PATENT ABSTRACTS OF JAPAN vol. 16, no. 233 (E - 1209) 28 May 1992 (1992-05-28)
- [A] PATENT ABSTRACTS OF JAPAN vol. 13, no. 355 (P - 914) 9 August 1989 (1989-08-09)

Cited by

SG81957A1; CN104110778A; CN113294935A; EP0933598A3; US5929591A; EP0820136A3; EP1094220A4; EP1467099A3; EP1467162A3; US6497109B1; WO9816995A1

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DE ES FR GB IT

DOCDB simple family (publication)

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DOCDB simple family (application)

EP 94116901 A 19941026; DE 69415774 T 19941026; DE 69433429 T 19941026; EP 97112632 A 19941026; ES 94116901 T 19941026; ES 97112632 T 19941026; KR 19940029521 A 19941108; US 33030694 A 19941027